Increasing Access to Clinical Information on Hospital Wards

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Medical library information resources can make a positive contribution to the clinical information needs of health care professionals. To increase availability of knowledge-based information and transfer information to its point of use, a CD-ROM resource library was networked and interfaced with the existing hospital information system at Children's Hospital of Michigan in Detroit, Michigan. Clinicians in 21 patient care areas now have access to the patient record, full-text pediatric journal information and the Micromedex CCIS database at one location.

INTRODUCTION

Children's Hospital of Michigan (CHM) is a 260 bed pediatric hospital that is part of the Detroit Medical Center (DMC) in Detroit, Michigan. The CHM experience of linking and relating the library to institution-wide computer networks can be traced back to 1987 [1]. At that time, screens were developed for requesting a LATCH (Literature Attached to the Chart) and for requesting patient education materials from the hospital-wide patient information system. These were given a procedure code so that they could be requested in the same manner as an x-ray or laboratory test. Two preformatted message screens were also developed, one for an article or book request, and one for a literature search or information request.

In 1992 an Information Systems Grant was funded through the National Library of Medicine to increase access to knowledge-based information in the patient care areas of the hospital. A multi-disciplinary Medical Information Systems Committee consisting of librarians, physicians, nurses, pharmacists, and information systems personnel advised the project's coordinators. This committee is still involved with the project's progress. A preliminary needs assessment of in-house and outside attending staff solicited input to determine the areas of greatest information need. This assessment supported previous studies in the literature reporting that clinicians wanted journal and drug related information which was physically close, either in their office or on the unit [2,3].

METHODS / RESULTS

To increase availability of information resources, full-text health science information in CD-ROM format has been linked to the CHM patient information system and provided to users at point of need on the wards. A fiber optic backbone was installed to the patient care floors and an Ethernet LAN configuration was used to add twenty-one microcomputers at nursing stations, in clinical conference rooms, the physicians' lounge, the Poison Control Center, the Drug Information Center and the nursing administration offices. The LAN was then connected, by means of an existing DMC FDDI campus ring, to a Tricord 40/50C file server with a CD-ROM tower at the DMC Campus Data Center. This was the link to full-text information. Another link was made by means of T1 lines to the DMC Troy Data Center where the computer containing the hospital information system was housed. Microsoft Windows and terminal emulation software were installed on each of the 21 PCs. Both the CD-ROM information and the patient information were brought together on the desktop PC with a Windows interface. This PC functions as both an order-entry and a clinical information workstation.

Doctors, nurses, allied-health personnel, and students now have access to the Micromedex CCIS and the CMC Research, Inc's library of pediatric journals and Yearbook series. Clinicians in patient care areas can now look at a patient's record, order a test, find information on a disease or drug and order a literature search or patient education materials, all at the same location.

Reference

[1]. MS. Klein. Adapting IAIMS to a hospital level. Bull Med Libr Assoc 1989;77:357-365.
[2]. SH. Woolf, et al. The medical information needs of internists and pediatricians at an academic medical center. Bull Med Libr Assoc 1989;77:372-80.
[3]. SP. Curley, et al. Physicians' use of medical knowledge resources: preliminary theoretical framework and findings. Med Decis Making 1990;10:231-41.

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